

	Overall	Paclitaxel n=57 (29%)	Sirolimus n=96 (49%)	Everolimus n=44 (22%)	P-value
R-ISR Presentation					
Pattern					0.27
Focal	22%	11(19%)	26(27%)	7(16%)	
Diffuse	78%	46(81%)	70(73%)	37(84%)	
Time index procedure to R-ISR, months \pm SD	34 \pm 20	35 \pm 21	42 \pm 20	16 \pm 8	0.28
Time index procedure to first-ISR, months \pm SD	18 \pm 16	18 \pm 16	23 \pm 18	7 \pm 4	0.52
R-ISR Treatment					
Stent use	53%	48%	57%	52%	0.54
Outcome					
Death	4%	9%	1%	2%	0.05
MI	3%	7%	2%	0%	0.12
TVF	18%	23%	17%	14%	0.58
MACE (Death, MI, and TVF)	21%	32%	18%	16%	0.06

TCT-483

Predictors of Early Stent Thrombosis After Implantation of Drug-Eluting Stents in Daily Clinical Practice – A Subanalysis of the Large, Prospective DESIRE (Drug-Eluting Stent In the Real World) Registry

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Background: Previous studies have suggested that early ST (<30 days) may have a different physiopathology as compared to late events occurring after this period. Our objective was to investigate the predictors of ST in a large cohort of patients enrolled in the prospective, single center DESIRE Registry.

Methods: A total of 4,790 pts (7,530 lesions) undergoing elective for emergency PCI solely with DES (n=8,058) as a default strategy were enrolled between May/02-Mar/13. Clinical follow-up (FU) was performed at 1, 6 and 12 months and yearly up to 10 years (97.3%). ST was defined according to the propositions of the Academic Research Consortium.

Results: The overall incidence of ST was 2.4% (n=111), given that 95% of patients were ST-free up to 10 years FU (Kaplan-Meier estimate). Compared to those without ST, pts with ST had a trend towards more diabetes (36 vs. 30.5%, p=0.18) and target lesion in saphenous vein grafts (SVG) (7.4 vs. 5.6, p=0.10), and significantly more current smoking (41.2 vs. 30.1%, p=0.02), clinical presentation of recent MI (29.9 vs. 15.2%, p<0.001), moderate/severe lesion calcification (36.1 vs. 26.8%, p<0.001), poor left ventricle ejection fraction (<30%) (18.2 vs. 2%, p=0.02), multiple DES implanted (56.6 vs. 46.1%, p=0.03), and residual stenosis as assessed by QCA (5.0 vs. 3.7%, p=0.001). In the multivariate model, independent predictors of ST were recent MI (<72 hours) (HR 2.66, 95% CI 1.52-4.66, p=0.001), recent MI (3-30 days) (HR 1.89, 95% CI 1.08-3.29, p=0.03), >1 DES implanted (HR 1.89, 95% CI 1.28-2.80, p=0.002), SVG (HR 2.21, 95% CI 1.29-3.78, p=0.004), and residual stenosis (HR 1.03 per % unit, 95% CI 1.00-1.05, p=0.03). Early ST was found in 12.6% of cases (14/111) and independent predictors for this event were diabetes (OR 2.45, p=0.01) and recent MI (<72 hours) (OR 3.65, p<0.001).

Conclusions: Early ST was a rare event and was significantly associated with diabetes and clinical presentation of recent MI (< 72 hours). When considering the overall incidence of ST (2.4%), significant independent predictors were recent MI (< 72 hours and between 3-30 days), multiple DES implanted, SVG and stent underexpansion.

TCT-484

Impact of Second Generation Drug-Eluting Stents on the Occurrence of Late and Very Late Stent Thrombosis – A Subanalysis of the Large, Prospective DESIRE (Drug-Eluting Stent In the Real World) Registry

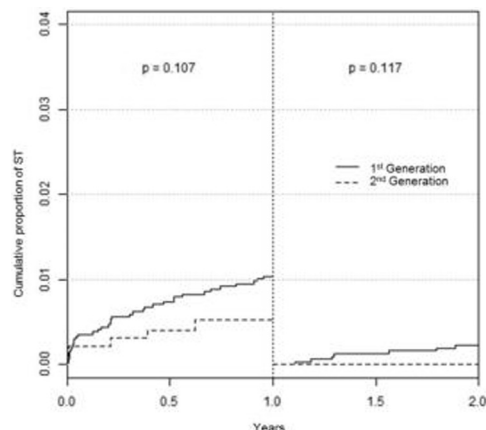
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Background: Stent thrombosis (ST) has been described as a rare event in current drug-eluting stent (DES) era; however, its occurrence has been associated with relatively high morbimortality. Our objective was to investigate the impact of second generation DES on the occurrence of ST in daily clinical practice.

Methods: A total of 4,790 pts (7,530 lesions) undergoing elective for emergency PCI solely with DES as a default strategy were enrolled between May/02-Mar/13. Clinical follow-up (FU) was performed at 1, 6 and 12 months and yearly up to 10 years (97.3%). Overall, a total of 8,058 DES were implanted including 1st generation

(Cypher/Taxus) in 69% and 2nd generation (Xience/Promus/Resolute/Endeavor/Bio-Matrix) in 31%, given that mean FU for pts treated with 1st vs. 2nd generation DES were 5.3 \pm 2.6 vs. 1.1 \pm 1.0, respectively.

Results: Overall, mean age was 64 years, 31% had diabetes, 23% had previous MI and 41% presented with acute coronary syndrome. Compared to pts treated with 1st generation DES, those treated with 2nd generation DES had more diabetes (p<0.001), multivessel disease (p<0.001), and multiple DES implanted (p<0.001), but angiographic success was similar in both groups (>99%). The occurrence curve for ST (ARC) up to 2 years FU with landmark analysis at 1 year is shown in the Figure.



Conclusions: Compared to 1st generation DES, the use of 2nd generation DES was associated with a non-significant trend towards less occurrence of ST up to 2 years FU, given that there were no very late ST found with 2nd generation DES.

TCT-485

Paclitaxel Prevented the Intimal Proliferation after Percutaneous Coronary Intervention for Patients with Renal Insufficiency

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Background: In the first generation drug-eluting stent (DES) era, it had reported that clinical outcome of paclitaxel-eluting stent (PES) deployment was better than sirolimus-eluting stent. But clinical outcome of PCI with second generations DES was not established. Our aim was to investigate the clinical outcomes of hemodialysis (HD) patients after PCI with DES.

Methods: In 6298 consecutive cases which underwent PCI with DES between April 2007 and June 2012, 182 consecutive patients (247 lesions) on HD patients were treated with PES (P group: 93 patients, 117 lesions), everolimus-eluting stent (E group: 54 patients, 78 lesions) or biolimus-eluting stent (B group: 35 patients, 52 lesions) implantation and were follow up to 8 months. The primary endpoints were angiographic outcomes and MACE (death, myocardial infarction, CABG, target lesion revascularization: TLR).

Results: Clinical follow up was obtained on all patients. Angiographic follow up was obtained in 201 lesions (81.4%). No significant difference was detected in the baseline demographic, angiographic, and lesion characteristics. In eight month follow-up, the mean values of late lumen loss (P group: 0.5 \pm 0.8mm, E: 0.6 \pm 0.8mm, B: 1.0 \pm 0.6mm; p=0.01), TLR (P group: 9.3%, E: 15.4%, B: 28.9%; p<0.01) and MACE (P group: 12.7%, C: 19.2%, B: 28.9%; p=0.04) in P group was the lowest in these groups. In multivariate analysis, predictors of TLR were diabetes mellitus (OR: 2.7, 95%CI: 1.1-7.0, p=0.025), BES deployment (OR: 3.4, 95%CI: 1.5-7.5, p=0.0027) and product of serum calcium and phosphorus>38 (OR: 3.6, 95%CI: 1.6-8.9, p=0.0016).

Conclusions: In PCI with DES for HD patients, second generation DES hasn't improved clinical outcomes. PES deployment is still usefulness today.